

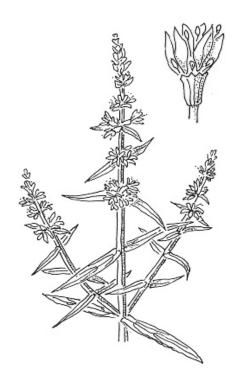
Volume 1 Spring 2002

The New England
Invasive Plant Group (NIPGro)
is an organization that networks agencies,
organizations and individuals addressing the invasive
plant issue in the region. Our goal is to facilitate solutions to
the invasive plant problem through partnerships and sharing
information and resources within the region. Priorities include
an "early warning and rapid response system" to stop new
invaders, effective outreach to target audiences and the
promotion of research and management activities.

All are invited to join the NIPGro
network.

#### What and Who is NIPGro?

The purpose of the U.S. Fish and Wildlife Service's Silvio O. Conte National Fish and Wildlife Refuge (Conte Refuge) is to protect native species throughout the Connecticut River watershed. Through a grant from the National Fish and Wildlife Foundation, Refuge staff thoroughly investigated the invasive plant issue and published findings and recommendations in *The Connecticut River Watershed/Long Island Sound Invasive Plant Control Initiative Strategic Plan* (March, 1999) (available at <a href="http://www.fws.gov/r5soc/announce.htm">http://www.fws.gov/r5soc/announce.htm</a> or from the Refuge at 413-863-0209).



Lythrum salicaria, Purple loosestrife Illustration by Annie Chappel

There was an obvious need for a regional organization to provide the means to share information and coordinate actions, so the plan recommended forming one. A large informational meeting was held in June 1999, and a steering committee was appointed which first met in September 1999. This new regional organization is known as the New England Invasive Plant Group (NIPGro). NIPGro adopted the priority actions recommended in the strategic plan (see sidebar). The National Fish and Wildlife Foundation funded efforts to implement the strategic plan in 2000 and 2001. The U.S. Department of Agriculture is funding NIPGro to continue this work through the fall of 2005.

Who is in the network? The Steering Committee is comprised of representatives of at least one key organization in each state, as well as representatives of the statewide invasive plant groups. The mailing list, now more than 1,050 individuals, includes original contacts from the Strategic Plan; "core members" who came to the first informational meeting, representatives from organizations active in the field or those who want to become active, and individuals continue on page 2

### What and Who is NIPGro?

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with an interest in the subject. There are representatives from conservation, horticulture, land management, research, recreation, and education organizations. Cynthia Boettner, from the Conte Refuge, is the coordinator of NIPGro. Controlling invasive plants is an overwhelming problem and we hope that by joining forces, NIPGro can make a difference.

# **NIPGro News**

#### **NIPGro Funded for Four Years**

We are on the cusp of a flurry of activity to work on the invasive plant problem in New England. You are invited to participate! The most exciting news is that the daily operations of NIPGro and some of our most important priorities have been funded for the next four years. The U. S. Department of Agriculture awarded a grant to the University of Connecticut, the New England Wild Flower Society, and the Conte Refuge (on behalf of NIPGro). This grant will enable us to work with partners to undertake the following:

- Track the distribution and spread of over 100 non-native aggressive plant species throughout New England and make the information available online,
- Form an Early Warning System for new invaders to a locality,
- Encourage Rapid Response activities,
  - Through the newsletter, exchange information on member's projects, management techniques, research findings, funding sources, partnering opportunities, etc.,
- Expand and promote the collection of slides available to members for presentation purposes,
- Expand and promote the Information and Referral Service,
  - Expand outreach to new audiences,
- Hold conferences in 2003 and 2005,
  - Make a website available in late 2002 or 2003, and
- Compile information on alternative species which could replace invasives still used for various purposes.

### **Slide Library**

Have you ever wanted to give a presentation about invasive plants, but cast the idea aside because it would be too difficult to find appropriate slides? Well, seek no further. A number of network members generously donated the use of their slides to NIPGro for presentations. Four sets currently are available on loan or for purchase at cost. Twentysix species are covered in two sets from the New England Wild Flower Society, Allison Bell and other various photographers. Donna Ellis, University of Connecticut, supplied text slides with definitions and facts. Two sets on purple loosestrife include one on the biology and control of the plant (with accompanying script) donated by the Conte Refuge, and one from Donna Ellis describing purple loosestrife biological control. These slides have been widely used by network members. If you are interested in this resource, contact Cynthia at cynthia\_boettner@fws.gov.

### **Important News!**

# The Newsletter is Finally Here!

Here is the first issue of the long-awaited NIPGro newsletter! We hope you find it informative and helpful.

This is our network's main vehicle to share information with each other. We encourage you to send in briefings/ notices to include in future issues. To save on mailing and printing costs, all future issues will be sent via email.

#### TO GET FUTURE MAILINGS

Please check the label below to ensure we have your correct email address and contact information and notify us of any corrections. If you don't have email, contact us for a hard copy of the next issue. (NIPGro, 52 Avenue A, Turners Falls, MA 01376, 413-863-0209 x6, cynthia\_Boettner@fws.gov)



### **NIPGro News**

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### **NIPGro Conferences, Past and Future**

In March of 2001, NIPGro and the University of Massachusetts coordinated a "Share Fair" for participants to exchange outreach materials and strategies. Presentations addressed ways to raise public awareness, how to run a successful volunteer program, and how to design an effective website. There was ample time for participants to network and impart their own success stories. A compilation of materials shared at this conference is available on loan from the NIPGro office by contacting Cynthia at cynthia\_boettner@fws.gov.

Although the date has not been set, plans are underway for the 2003 NIPGro conference, to be co-hosted by the University of Massachusetts Extension and Department of Natural Resources Conservation at the Amherst, Massachusetts campus. Researchers will present recent findings on the biology, ecology and control of invasive plants in New England. We'll keep you posted.

# **Invasive Plant Atlas of New England**

# **New Tools for Inventory and Early Action**

We don't have a clear picture of the distribution of invasive plants in our region, and often in our own communities. Les Mehrhoff, University of Connecticut, estimates that there are over 100 species of non-native aggressive plants in our region. We have so many questions about these plants. Which of these species are truly invasive? How widespread is each species? What habitat types does each invade? How can we prioritize management activities to make the most positive impact in an efficient and environmentally safe manner? A grant from the U.S. Department of Agriculture will help us begin to answer these questions over the next four years.

#### **Online Atlas**

The Invasive Plant Atlas of New England (IPANE) will track the distribution of the 100 species that are known or suspected to be invasive throughout New England. A corps of volunteers will be trained by the New England

# How you can participate in the NIPGro network:

- Contribute to the semi-annual newsletter: send updates about your organization's activities, your research findings, funding leads, notices about upcoming events, etc.;
- Share your expertise: If you are willing to field calls from others in the region, let us know and we will refer pertinent requests to you. Similarly, let us know if you would consider giving presentations;
- Share your publications: Consider giving rights to use graphics and text to others wishing to develop a similar resource. Before reprinting, check to see if anyone would like to purchase copies through bulk orders. You can notify the network of these opportunities through the newsletter;
- If your organization has a publication or holds meetings, help us get information out to people who manage land, recreate in the out-of-doors, sell and purchase plants, design landscapes, or otherwise make decisions about invasive plants through articles, announcements, poster displays, or handouts;
- Research Repository: Let us publicize your research
  findings through the newsletter and website or direct
  people to the appropriate journal. Fields of special interest
  include invasive plant biology or control, ecological impacts
  of invasive plants, and habitat restoration. We will compile
  and make available a repository of research needs and ideas;
- Contribute data to the Invasive Plant Atlas of New England;
- Volunteer for control events.

Wild Flower Society to identify these plants and document their current range. Information collected by volunteers and historical data from herbaria will be stored in a database at the University of Connecticut. The data will be posted on the Internet and used for early detection, research and decision-making on how to slow their spread and reduce impacts on our native flora. More information can be found on the IPANE web site <a href="www.eeb.uconn.edu/invasives/ipane">www.eeb.uconn.edu/invasives/ipane</a> and the New England Wild Flower Society <a href="www.newfs.org">www.newfs.org</a>. The principal investigators in this project are Dr. Leslie Mehrhoff and Dr. John Silander of the University of Connecticut with the volunteer component being overseen by Bill Brumback, Chris Mattrick and Bryan Connelly of the New England Wild Flower Society.

# **Invasive Plant Atlas of New England**

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# **Early Detection Alerts!**

This will be a regular feature of the newsletter. Just in case you have missed the IPANE Website warnings, the newsletter will highlight information about new invaders to watch for and report.

# Hydrilla, Hydrilla verticillata (L. f.) Royle

Hydrilla has only has been found in a few sites in Connecticut and one in Massachusetts. Please learn how to identify this plant and be on the lookout for it. This is one plant we definitely do not want taking hold in our waters.

Listed on the Federal Noxious Weed List, this plant shades important native aquatic plants, impedes recreation, can alter water chemistry and oxygen levels, and clog irrigation and flood control devises and water control pumping stations. In Florida,

millions of dollars are spent on herbicides and other control measures each year. Based on its distribution in Russia, experts predict that Hydrilla could invade waterbodies as far north as the USA/Canadian border.

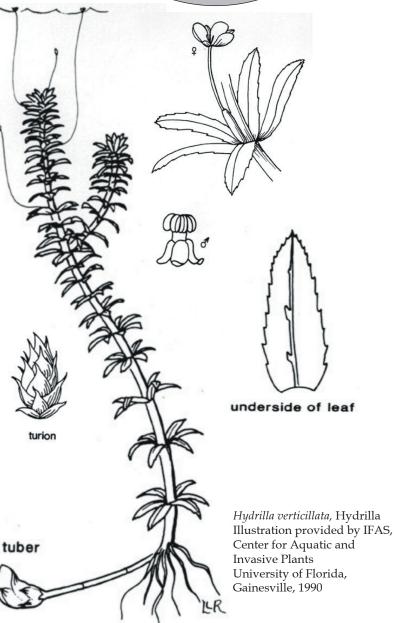
Hydrilla spreads easily by floating plant parts or the turions that grow in the bottom of the pond. Movement can be facilitated by birds and by unintentional human transport on boats and other objects. It also can be introduced into a body of water as a contaminant with water garden plants or by dumping plants used in aquaria. It often is confused with native *Elodea canadense* and *Elodea nuttallii*, both widespread in the region, and also the introduced Brazilian waterweed, *Egeria densa*.

Hydrilla was originally discovered in New England in 1989, however because of misidentification it went unreported until 1995. In Connecticut it has been documented in two small, artificial ponds in Stonington (New London County) and one pond in Wilton (Fairfield County). One of the ponds was dredged and the material removed was dried and frozen under black plastic to kill the tubers, which appears to have worked. Herbicides were used on the other two ponds. Follow-up treatment was necessary at one pond and all three will be monitored in 2002. In October 2001, Hydrilla was reported from a large pond in Barnstable (Barnstable County) Massachusetts. Staff at the Massachusetts Lakes and Ponds Program will formulate a plan to remove this invasive before it has the chance to spread.

For more information on Hydrilla visit the IPANE website and the University of Florida's website: <a href="http://aquat1.ifas.ufl.edu/seagrant/hydver2.html">http://aquat1.ifas.ufl.edu/seagrant/hydver2.html</a>

# Call for Volunteers

In 2002, IPANE coordinators want to train 25 volunteers in each New England state to survey their local area and record data for the Invasive Plant Atlas. An additional 50 volunteers in each state will be recruited and trained in 2003 and another 50 in 2004. Two-day training workshops taught by the New England Wild Flower Society will occur in the spring and summer in each state. Classes will include an indoor identification session using slides, herbarium sheets, and other prepared materials, and outdoor field visits to local invasive species sites. See "Upcoming Events" for workshop dates and locations.



# **Invasive Plant Atlas of New England**

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# Japanese Stilt-grass, Microstegium vimineum

Also known as *Eulalia viminea* (Trin.) Kuntze, Asian stilt grass, Vietnamese stilt grass, Nepal microstegium, and Chinese packing grass, *Microstegium vimineum* is native to tropical Asia. In the United States, it is has been reported from New York to Florida, and west to Illinois, Arkansas, Louisiana and Texas. It also has been reported from Puerto Rico. In New England it is known only in Connecticut and Massachusetts, but should be anticipated in Rhode Island, as it has been collected in Groton, Connecticut, less than five miles from the state line. If you find it, collect a specimen of the entire plant (including roots) and contact the Les Mehrhoff of the IPANE project at 860-486-5708.

Since its initial report from Tennessee in 1919, *Microstegium vimineum* spread northward, reaching southern New England by the 1980s. The first Connecticut report came from Branford in 1984. So far, the only known Massachusetts occurrence is in West Springfield (Hamden County), where the New England Wild Flower Society has organized volunteer control events since its discovery in 1998.

Japanese stilt grass is an annual grass (family Poaceae) with a sprawling habit that may grow 3-6 feet in height. It is easily confused with *Leersia virginica*, the native White Grass. A table on the IPANE website compares the characteristics of these two species and provides more detailed identification information. *Microstegium vimineum* has the ability to form dense stands that dominate entire habitats, displacing native understory and wetland species. It may disperse long distances by clinging to animals and people, easily invades disturbed areas, and has the ability to thrive and produce long-lived seeds under a shading canopy. In Connecticut, this grass has invaded floodplain forests, early and late successional forests, abandoned fields, roadsides, and other habitats.

See the IPANE website for links to sites with additional information, including The Nature Conservancy's website which has extensive control information (<a href="http://tncweeds.ucdavis.edu/esadocs.html">http://tncweeds.ucdavis.edu/esadocs.html</a> and the Native Plant Conservation Initiative's Alien Plant Working Group website (<a href="http://www.nps.gov/plants/alien">http://www.nps.gov/plants/alien</a>).

# State and Regional Group Project Updates

Each state in New England has at least one statewide group that works on invasive plant issues. Some groups also address invasive animals (including insects) and diseases. Some address only aquatic species. Please refer to the newsletter insert for synopses. Future issues of the newsletter will highlight current projects.

Microstegium vimineum,
Japanese stiltgrass
Illustration provided by the
Tennessee Exotic Pest Plant Council

# Project Updates from NIPGro Network Members

There are a lot of great inventory, management and outreach projects going on in New England! We would like to highlight at least one project from each category in every issue of the semi-annual newsletter. Please send a brief description of one of your organization's projects for a future issue.

# **Inventory**

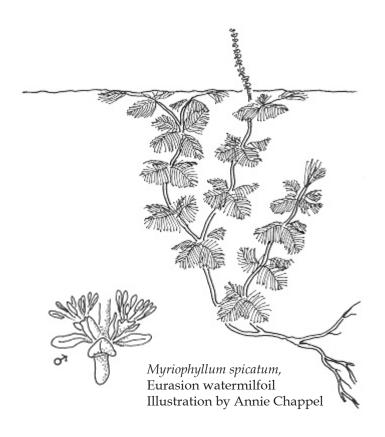
New England Wild Flower Society (NEWFS). In partnership with the White Mountain National Forest (WMNF) and with funding from the National Fish and Wildlife Foundation's *Pulling Together Initiative*, NEWFS has undertaken a three-year project to survey the most likely avenues of infestation in and around the 780,000 acre WMNF. In 2001, the first year of this project, 61 trained volunteers documented and mapped over 900 populations of invasive species. Most sites were in disturbed areas along roads and river shores, although some significant discoveries were made in more remote areas.

NEWFS volunteers also are approximately halfway through a project to survey 200 Massachusetts natural areas for the presence, abundance and distribution of invasive plant species. They also are undertaking a similar project in Rhode Island in 2002, in partnership with the Rhode Island Natural History Survey. *Chris Mattrick, cmattrick@newfs.org*, 508-877-7630

### **Outreach and Education**

Maine Dept. of Environmental Protection (MDEP). Transport on boats and gear is the major cause of spreading aquatic invasive plants. Traffic surveys and boat counts by Maine Department of Transportation and MDEP indicated that almost 50,000 boats cross the state borders each year. A pilot program of voluntary boat and trailer inspections indicates that approximately 1,200 boats carry plants around Maine each summer, in each instance a threat to infest a lake or stream.

Education and outreach in 2001 built on previous work by the cooperators. An aggressive public relations campaign by the Maine Department of Inland Fish and Wildlife (DIFW) and the MDEP included distribution of over 100,000 invasive plant brochures, almost 20,000 handouts at the York toll plaza, 1,000 TV public service announcements, newspaper feature articles and radio coverage. As a result, an omnibus survey showed that up to 80% of Maine residents now know something about the problem, but far fewer know what to do about it.



MDEP and DIFW will continue to enlist the aid of a variety of state agencies and non-governmental groups during 2002. In particular, organizing voluntary boat inspections at launching ramps and deploying volunteer lake monitors are cost efficient ways to both educate the public and reduce plant spread. Continued warden involvement in boater contact, including voluntary inspections, is planned for 2002, along with increased boater contacts through direct mailings, and distribution of revised educational materials. *John McPhedran*, 207-287-6110

# **Project Updates from NIPGro Network Members**

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#### **Control**

The Nature Conservancy's Berkshire Taconic Landscape Program has launched an ambitious, five-year plan to address the threat posed by invasive species to the largely intact and functional, 36,000-acre Taconic Plateau forest landscape. This area is regarded as one of the most ecologically significant forests in southern New England. Inventories completed in 2000, indicate that aggressive, non-native species infest more than 50% of this region. Known as "Weed It Now," this initiative will control woody invasives such as Japanese barberry and oriental bittersweet on state, federal and privately owned forest land within the Taconic Plateau in southwestern Massachusetts, northwestern Connecticut and eastern New York. This innovative partnership will expand an invasive-free area by 9,000 acres during the next five years.

In the first year this initiative received \$100,000 in earmarked federal funds with the full, bipartisan support of all three Congressional representatives in Massachusetts, Connecticut and New York whose districts include the project area and from both Massachusetts senators. Work is proceeding to acquire the permits and funds for subsequent years of the initiative.

During 2002, a professional crew will control invasives at Jug End Reservation in Egremont, MA; Mt. Riga State Forest and a portion of the Appalachian Trail in Salisbury, CT; and a large, private landholding adjacent to Taconic State Park in Copake Falls, NY. For more information about Weed It Now, contact Jessica Murray at The Nature Conservancy, Berkshire Taconic Landscape Program, P.O. Box 268, Sheffield, MA.



Celastrus orbiculatus, Oriental bittersweet Illustration by Annie Chappel

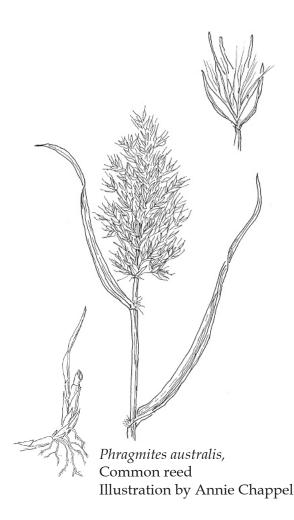
# **Examples Requested**

NIPGro is collecting examples of existing legislation, regulations, policies, and by-laws that are intended to address the invasive plant problem. Once compiled, these will be made available to members upon request. If your state, town, or agency has adopted any such measures, please send a copy to the NIPGro office (52 Avenue A, Turners Falls, 01376, cynthia\_boetter@fws.gov). Any additional comments regarding in effectiveness would be appreciated.

# Regulation/Legislation/Policy

Vermont. On March 20, 2002, a new Vermont quarantine rule was adopted that prohibits the importation, movement, sale, possession, cultivation, and/or distribution of certain non-native noxious weeds. Eleven species on the Federal Noxious Weed List not yet found in Vermont are included in this regulation. Also included are twentyone species already in the state and posing serious threats.

The quarantined species pose a risk to a substantial agricultural, forestry or environmental interest. In order to be listed, determinations were made that 1) a quarantine would contribute to preventing introduction or limiting the spread and impact, 2) no other mitigating action would accomplish the same purpose, and 3) the economic or environmental benefits of quarantining the species would outweigh the economic or environmental benefits associated with the weed. A number of biological factors were used to evaluate whether a plant satisfies the conditions for designation. For more information, contact Scott Pfister, Vermont Department of Agriculture, Food and Markets, 802-828-3481, spfister@agr.state.vt.us. The rule is referred to as "Quarantine #3 – Noxious Weeds."



# **Research Findings**

### **Phragmites**

In an effort to learn why the common reed has increased dramatically in the past 150 years, Kristin Saltonstall of Yale University compared the DNA of current populations of *Phragmites australis* to historical ones from herbarium collections. She found that an introduced type has spread to regions previously not known to have *Phragmites*. This introduced type has apparently replaced the native type in New England. This work is published in:

"Cryptic invasion by a non-native genotype of the common reed, *Phragmites australis*, into North America." 2002. *Proceedings of the Natural Academy of Science of the United States of America*, 99: 4, 2445-2449 (www.pnas.org/cgi/doi/10.1073/pnas.032477999). Additional information can be found at: http://pantheon.yale.edu/~salt/

In conjunction with this research, a system is being developed to enable people to distinguish the native and nonnative genotypes using morphological features. Help from interested parties throughout North America is being sought to confirm these morphological differences. This collaborative project between Kristin Saltonstall at Yale University, the Biological Control of Non-Indigenous Plant Species Program at Cornell University, and the University of Rhode Island is further discussed on the website http://www.invasiveplants.net. Questions can be directed to Bernd Blossey at bb22@cornell.edu.

# **Publications/Websites**

The Nature Conservancy offers a number of valuable informational resources that can be accessed for free from your own computer. The website: <a href="http://tncweeds.ucdavis.edu/esadocs.html">http://tncweeds.ucdavis.edu/esadocs.html</a> holds "Element Stewardship Abstracts" for numerous species. These summarize life

history, ecology, impacts, known management techniques, and a list of resource people and bibliography for each species. Check <a href="http://tncweeds.ucdavis.edu/">http://tncweeds.ucdavis.edu/</a> for the 200 page <a href="Weed Control Methods Handbook">Weed Control Methods Handbook</a> which provides a thorough evaluation of management options, herbicide information, etc.

The Nature Conservancy's Invasive Species Listserver enables subscribers to:

- 1) Exchange information and advice on invasive species, including new pest warnings and advice on how to prevent, contain, and control them;
- 2) Provide alerts on relevant legislation, policy proposals and actions;
- 3) Post notices about useful articles and tools;
- 4) Provide a forum for your questions, ideas and answers about pests;
- 5) Provide alerts on control and research funding opportunities.

Sign up for this free service by contacting Barry Meyers-Rice at: bazza@ucdavis.edu

Funding
Opportunties
This section will

This section will provide funding ideas in future issues.

**National Perspective.** For good background information on Federal programs dealing with invasive species, check out the website: http://www.invasivespecies.gov/

# Upcoming Events Within New England

Our New England Waters: Uncommon Resources, Common Responsibility: Annual Meeting the New England Chapter of the North American Lake Management Society

May 31(workshops) and June 1(presentations), 2002

This meeting will include many sessions on aquatic plants, including identification, mapping, management, legislative action, and other lake management issues. For more information, check the website: <a href="http://www.nalms.org/">http://www.nalms.org/</a> or contact Ken Wagner at 860-429-5323.

# **Upcoming Events**

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## **Invasive Plant Atlas of New England (IPANE) Volunteer Training Sessions** (see the preceding article "A Call for Volunteers")

May 4-5, 2002, Kingston, RI, University of Rhode Island

May 18-19, 2002, Storrs, CT, University of Connecticut

June 1-2, Burlington, VT, University of Vermont

June 8-9, Turners Falls, MA, Great Falls Discovery Center, associated with the Conte Refuge.

June 15-16, Sudbury, Massachusetts, Great Meadows National Fish and Wildlife Refuge

June 22-23 Concord, NH, Society for the Protection of New Hampshire Forests

June 29-30, Unity, ME, MOFGA (Maine Organic Farmers and Growers Association) Education Center

People interested in volunteering for the Invasive Plant Survey should contact Bryan Connolly, Invasive Plant Survey Coordinator, 76 Warrenville Rd., Mansfield Center, CT 06250, phone 860-423-8305 or 508-877-7630 ext. 3208, email bconnolly@newfs.org or connollybryan@hotmail.com.

# **Controlling Invaders**

Volunteer Work Days With the New England Wild Flower Society

Japanese Stilt Grass, West Springfield, MA. Friday-Sunday, August 23, 24, 25. This is the only population known in Massachusetts. Now is the time to help keep it from spreading! Water Chestnut, Upper Mill Pond in Rowley, MA. July 9, 10, 20, 21, 22, 23. This could become a bane to recreation and other ponds in the area unless we act quickly.

**Phragmites** cutting in Groveland, MA near Newburyport on July 27, 28. 31, August 7, 8, 9.

For above events, contact Chris Mattrick at mattrick@newfs.org or 508-877-7630 ext. 3203.

### Volunteer Water Chestnut Hand Harvesting from Canoes in the Connecticut River Watershed

Help keep this plant from becoming entrenched in the watershed. Volunteer efforts are greatly paying off where we have pulled the past three years.

Forge Pond, Granby, MA Arcadia Sanctuary, Easthampton, MA Oxbow Area, Northampton and Easthampton Lake Warner (North Hadley Pond), Hadley, MA Newly Discovered Sites

Trapa natans, Waterchestnut Illustration provided by IFAS, Center for Aquatic plants University of Florida, Gainsville, 1990

Contact Cynthia at (cynthia\_boettner@fws.gov, 413-863-0209 x6) or Heather Ruel (theriverruels@the-spa.com, 413-467-2844) for more information

#### **Invasive Plants in Public Landscapes: Meeting the Challenge**

November 7, 2002, Burlington, CT, Sessions Woods Wildlife Management Area

Planned by the Connecticut Invasive Plant Working Group, this conference is oriented toward people who design or otherwise influence plantings on roadsides and other public spaces. Bonnie Harper-Lore from the Federal Highway Administration will be the keynote speaker. (http://www.eeb.uconn.edu/cipwg)

#### **Outside of New England**

National Invasive Weed Awareness Week IV is February 24th - 28, 2003 in Washington, D.C. The week provides venues to raise public and congressional awareness on the fight against noxious and invasive weeds. (http://www.nawma.org/niwaw.htm)

New England Invasive Plant Group 52 Avenue A Turners Falls, Massachusetts 01376



New England
Invasive Plant
Group's FIRST
newsletter of invasive
plant control activities in
New England!

Read on to find out information on what invasive plants to look out for; the latest research; upcoming events and much more!